

C 2

polyethylene molded block by irradiating the block with a high energy ray and thereby introducing a very small amount of crosslinking points into molecular chains of the block, then heating the crosslinked ultra high molecular weight polyethylene molded block up to a compression deformable temperature, compression-deforming the block by compressing the block in a direction perpendicular to the compression plane so as to deform the block, and then cooling the block while keeping the block in a deformed state, said block after cooling having a thickness range of 5 to 10 mm in a direction perpendicular to the compression plane.

C 3

9. (Four Times Amended) An ultra high molecular weight polyethylene molded block having orientation of crystal planes in a direction parallel to a compression plane, said block produced by slightly crosslinking an ultra high molecular weight polyethylene block by irradiating the block with a high energy ray and thereby introducing a very small amount of crosslinking points into molecular chains of the block, then heating the crosslinked block up to a compression deformable temperature, compression-deforming the block by compressing the block in a direction perpendicular to the compression plane so as to deform the block, and then cooling and solidifying the block while keeping the block in a deformed state, said block after cooling and solidifying having a thickness range of 5 to 10 mm in a direction perpendicular to the compression plane.

C 4

10. (Thrice Amended) Artificial joint for implantation in a joint of an animal comprising an ultra high molecular weight polyethylene molded block having been crosslinked slightly and having been compression-deformed in a direction perpendicular to a compression plane, cooled and solidified in a compression-deformed state so as to have orientation of crystal planes in a direction parallel to the compression plane, said block having a thickness range of 5 to 10 mm in a direction perpendicular to the compression plane.

11. (Thrice Amended) Artificial joint for implantation in a joint of an animal comprising an ultra high molecular weight polyethylene molded block having been crosslinked slightly and having been compression-deformed in a direction perpendicular to a compression plane so as to have orientation of crystal planes in a direction parallel to the compression plane, wherein said block having a thickness range of 5 to 10 mm in a direction perpendicular to the compression plane and the melting temperature of the molded block is in a range of 135 to 155°C.

REMARKS

By the present amendment, independent claims 1, 5 and 9-11 have been amended to further clarify the concepts of the present invention by modifying the claims to recite that the "block" has a thickness range of 5 to 10 mm in a direction perpendicular to the compression plane. Support for these amendments may be found, among other places, by the Preparation Examples on pages 8 to 10 of the subject specification. In Preparation Example 1, a starting block having a thickness of 3 cm is compressed to 1/3, 1/4.5, and 1/6 thickness, that is, the obtained blocks according to the present invention have thickness of 10 mm, 6.7 mm, and 5 mm, respectively. Therefore, Preparation Example 1 discloses blocks according to the present invention having a thickness range of 5 to 10 mm.

It is submitted that these amendments to the independent claims are helpful in distinguishing the subject claims over the cited prior art and do not raise new issues which would require further consideration and/or search. In addition, it is submitted that such amendments place the application in better form for appeal by materially reducing or simplifying the issues for appeal. Furthermore, no additional claims are presented without cancelling a corresponding